

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings of claims in the application:

1. (Currently Amended) A method ~~for enabling a first network to detect a loop in a second network, the second network being communicably coupled to the first network, the first network running a first loop avoidance protocol instance, the second network not running the first loop avoidance protocol instance, the method~~ comprising:

sending a first loop packet from a first port in a switching device bridge of ~~a~~ the first network running a loop avoidance protocol instance, the first loop packet including a first identifier with a first reference to the first port;

receiving a second loop packet at the switching device bridge, the second loop packet including a second identifier with a second reference to a second port;

comparing the second reference with the first reference; and

detecting the loop in ~~a~~ the second network when the first and second references match, the second network communicably coupled to the first network, the second network not running the first avoidance protocol instance.
2. (Currently Amended) The method as recited in claim 1, further comprising blocking at least one of the ports in the first switching device bridge when the first and second references match.
3. (Original) The method as recited in claim 2, wherein the blocking includes blocking the port which sent the first loop packet.

4. (Original) The method as recited in claim 2, wherein the blocking includes blocking the port which received the second loop packet.
5. (Currently Amended) The method as recited in claim 2, further comprising, when the second reference does not match the first reference, for a defined period of time, opening the at least one of the ports in the switching device bridge which was blocked.
6. (Currently Amended) The method as recited in claim 1, comprising when the second identifier does not correspond to any of the ports in the switching device bridge, forwarding the second loop packet to another switching device bridge.
7. (Currently Amended) The method as recited in claim 1, wherein the first identifier further includes a third reference to the switching device bridge, the second identifier further includes a fourth reference to another switching device bridge, and the method further comprises:

comparing the third and fourth references; and

when the third reference matches the fourth reference and the first reference does not match the second reference, dropping the second loop packet.
8. (Original) The method as recited in claim 1, wherein the first network is running a first instance of a spanning tree protocol and the second network is not running the first instance of the spanning tree protocol.

9. (Original) The method as recited in claim 1, wherein the first identifier includes a third reference to a VLAN where the first port resides.
10. (Currently Amended) A system comprising:
- a first network configured to run a first loop avoidance protocol instance, the first network communicably coupled to a second network, the second network not configured to run the first loop avoidance protocol instance;
 - a switching device ~~bridge~~ in the first network;
 - a first port in the switching device ~~bridge~~; wherein the first port is configured to send ~~sends~~ a first loop packet including a first identifier with a first reference to the first port;
 - the switching device ~~bridge~~ is configured to receive ~~receives~~ a second loop packet, the second loop packet including a second identifier with a second reference to a second port; and
 - the switching device ~~bridge~~ is further configured to determine ~~determines~~ the second reference, compare ~~compares~~ the second reference with the first reference, and detect ~~detects~~ the loop in a ~~the~~ second network when the first and second references match.
11. (Currently Amended) The system as recited in claim 10, wherein the switching device ~~bridge~~ further blocks at least one of the ports in the switching device ~~bridge~~ when the first and second references match.
12. (Original) The system as recited in claim 11, wherein the blocking includes blocking the port which sent the first loop packet.

13. (Original) The system as recited in claim 11, wherein the blocking includes blocking the port which received the second loop packet.
14. (Currently Amended) The system as recited in claim 11, wherein when the second reference does not match the first reference for a defined period of time, the first switching device bridge opens the at least one of the ports which was blocked.
15. (Currently Amended) The system as recited in claim 10, wherein when the second identifier does not correspond to any of the ports in the switching device bridge, the switching device bridge forwards the second loop packet to another switching device bridge.
16. (Currently Amended) The system as recited in claim 10, wherein the first identifier further includes a third reference to the switching device bridge, the second identifier further includes a fourth reference to another switching device bridge, and the switching device bridge further:

compares the third and fourth references; and

when the third reference matches the fourth reference and the first reference does not match the second reference, the switching device bridge drops the second loop packet.
17. (Original) The system as recited in claim 10, wherein the first network is running a first instance of a spanning tree protocol and the second network is not running the first instance of the spanning tree protocol.

18. (Original) The system as recited in claim 10, wherein the first identifier includes a third reference to a VLAN where the first port resides.
19. (Currently Amended) A switching device bridge in a first network communicably coupled to a second network, the first network running a first loop avoidance protocol instance, the second network not running the first loop avoidance protocol instance, the bridge comprising:
a first port configured to:
send; wherein the first port sends a first loop packet including a first identifier with a first reference to the first port;
the switching device configured to:
receive ~~the bridge receives~~ a second loop packet, the second loop packet including a second identifier with a second reference to a second port; ~~and~~
~~determine the bridge determines~~ the second reference; ~~compares~~
compare the second reference with the first reference; ~~and detects~~
detect a loop in a second network when the first and second references match, the
second network communicably coupled to a first network comprising the switching
device, the first network running a first loop avoidance protocol instance, the
second network not running the first loop avoidance protocol.
20. (Currently Amended) The switching device bridge as recited in claim 19, wherein the switching device bridge father blocks at least one of the ports in the switching device bridge when the first and second references match.

21. (Currently Amended) The switching device bridge as recited in claim 20, wherein the blocking includes blocking the port which sent the first loop packet.
22. (Currently Amended) The switching device bridge as recited in claim 20, wherein the blocking includes blocking the port which received the second loop packet.
23. (Currently Amended) The switching device bridge as recited in claim 20, further comprising, when the second reference does not match the first reference for a defined period of time, opening the at least one of the ports in the switching device bridge which was blocked.
24. (Currently Amended) The switching device bridge as recited in claim 19, wherein when the second identifier does not correspond to any of the ports in the switching device bridge, the switching device bridge forwards the second loop packet to another switching device bridge.
25. (Currently Amended) The switching device bridge as recited in claim 19, wherein the first identifier further includes a third reference to the switching device bridge, the second identifier further includes a fourth reference to another switching device bridge, and the switching device bridge further:

compares the third and fourth references; and

when the third reference matches the fourth reference and the first reference does not match the second reference, the switching device bridge drops the second loop packet.

26. (Currently Amended) The switching device bridge as recited in claim 19, wherein the first identifier includes a third reference to a VLAN where the first port resides.
27. (Currently Amended) A computer readable storage medium including computer executable code for performing a method, the method comprising enabling a first network to detect a loop in a second network, the second network being communicably coupled to the first network, the first network running a first loop avoidance protocol instance, the second network not running the first loop avoidance protocol instance, the code performing the steps of:
- sending a first loop packet from a first port in a switching device bridge of a the first network, the first loop packet including a first identifier with a first reference to the first port;
- receiving a second loop packet at the switching device bridge, the second loop packet including a second identifier with a second reference to a second port;
- determining the second reference;
- comparing the second reference with the first reference; and
- detecting the loop in a the second network when the first and second references match, the second network communicably coupled to the first network, the second network not running the first avoidance protocol instance.
28. (Original) The storage medium as recited in claim 27, wherein the code further enables the step of blocking at least one of the ports in the first network when the first and second references match.

29. (Original) The storage medium as recited in claim 28, wherein the blocking includes blocking the port which sent the first loop packet.
30. (Original) The storage medium as recited in claim 28, wherein the blocking includes blocking the port which received the second loop packet.
31. (Currently Amended) The storage medium as recited in claim 28, wherein the code further enables the step of opening at least one of the ports in the switching device ~~bridge~~ which was blocked when the second reference does not match the first reference for a defined period of time.
32. (Currently Amended) The storage medium as recited in claim 27, wherein when the second identifier does not correspond to *any* of the ports in the switching device ~~bridge~~, the code further enables the step of forwarding the second loop packet to another switching device ~~bridge~~.
33. (Currently Amended) The storage medium as recited in claim 27, wherein the first identifier further includes a third reference to the switching device ~~bridge~~, the second identifier further includes a fourth reference to another switching device ~~bridge~~, and the code further enables the steps of comparing the third and fourth references; and when the third reference matches the fourth reference and the first reference does not match the second reference, dropping the second loop packet.

34. (Original) The storage medium as recited in claim 27, wherein the first identifier includes a third reference to a VLAN where the first port resides.
35. (Currently Amended) ~~A system for enabling a first network to detect a loop in a second network, the second network being communicably coupled to the first network, the first network running a first loop avoidance protocol instance, the second network not running the first loop avoidance protocol instance, the system comprising;~~
a first network configured to run a first loop avoidance protocol instance, the first network communicably coupled to a second network, the second network not configured to run the first loop avoidance protocol instance;
a plurality of switching devices ~~bridges~~ in the first network;
a plurality of ports, at least one port for each of the switching devices ~~bridges~~; wherein each port connected to the second network is configured to send ~~sends~~ a respective first loop packet including a first identifier with a first reference to the respective port;
each switching device ~~bridge~~ is configured to receive ~~receives~~ a respective second loop packet, each second loop packet including a respective second identifier with a respective second reference to a respective second port; and
each respective switching device ~~bridge~~ is further configured to determine ~~determines~~ the respective second reference, compare ~~compares~~ the respective second reference with the respective first reference, and detect ~~detects~~ a loop in the second network when the respective first and respective second references match.
36. (Currently Amended) ~~A method for enabling a first network to detect a loop in a second network communicably coupled to the first network, the first network running a first loop~~

~~avoidance protocol instance, the second network not running the first loop avoidance protocol instance, the method comprising:~~

running a second protocol in ~~a~~ the first network running a first loop avoidance protocol

instance to detect a loop in the second network, the first network communicably coupled to a second network, the second network not running the first loop avoidance protocol instance; and

protecting the first network when a loop is detected in the second network.

37. (Currently Amended) A system for ~~enabling a first network to detect a loop in a second network communicably coupled to the first network, the system comprising:~~

a first network running a first loop avoidance protocol instance;

a second network not running the first loop avoidance protocol instance, the first network communicably coupled to the second network; and wherein:

the first network is configured to:

run ~~runs~~ a second loop avoidance protocol instance to detect for a loop in the second network; and ~~the first network further protects~~
protect the first network when a loop is detected in the second network.

38. (Original) The system as recited in claim 37, wherein the protecting includes blocking one of the ports in the first network.

39. (Currently Amended) A system comprising:

a first network configured to run ~~running~~ a first loop avoidance protocol instance; and

a second network communicably coupled to the first network, the second network not configured to run ~~running~~ the first loop avoidance protocol instance and having a loop; wherein the first network is protected from the loop in the second network.

40. (Original) The method as recited in claim 2, wherein the blocking includes blocking one of the port which sent the first loop packet and the port which received the second loop packet based on the respective port IDs.
41. (Currently Amended) The system as recited in claim 11, wherein the switching device ~~bridge~~ blocks one of the port which sent the first loop packet and the port which received the second loop packet based on the respective port IDs.
42. (Currently Amended) The switching device ~~bridge~~ as recited in claim 20, wherein the switching device ~~bridge~~ blocks one of the port which sent the first loop packet and the port which received the second loop packet based on the respective port IDs.
43. (Original) The storage medium as recited in claim 28, wherein the blocking includes blocking one of the port which sent the first loop packet and the port which received the second loop packet based on the respective port IDs.
44. (New) An apparatus comprising:
means for sending a first loop packet from a first port in a switching device of the first network running a loop avoidance protocol instance, the first loop packet including a first identifier with a first reference to the first port;

means for receiving a second loop packet at the switching device, the second loop packet including a second identifier with a second reference to a second port;
means for comparing the second reference with the first reference; and
means for detecting the loop in a second network when the first and second references match, the second network communicably coupled to the first network, the second network not running the first avoidance protocol instance.

45. A program storage device readable by a machine, embodying a program of instructions executable by the machine to perform a method, the method comprising:
sending a first loop packet from a first port in a switching device of the first network running a loop avoidance protocol instance, the first loop packet including a first identifier with a first reference to the first port;
receiving a second loop packet at the switching device, the second loop packet including a second identifier with a second reference to a second port;
comparing the second reference with the first reference; and
detecting the loop in a second network when the first and second references match, the second network communicably coupled to the first network, the second network not running the first avoidance protocol instance.